

M12: Cytotoxic T Cell Activity

Study Number: I07062
DTTID: 108-006-005-000-0
Study Type: Immune screening
Species/Strain: Rat/Sprague Dawley

Test Compound: 1020 Long Multiwalled Carbon Nanotubes
CAS Number: L-MWNT-1020
DTXSID: DTXSID601356181

Date: 29 Aug 2024
Time: 3:09:51 PM

Females: CTL

	Treatment Groups				
	0 mg/m ³	0.06 mg/m ³	0.2 mg/m ³	0.6 mg/m ³	15 mg/kg CPS
CTL Activity (12.5:1) ^a	9.93 ± 1.37[12]	10.87 ± 1.01[12]	10.74 ± 1.25[12]	9.45 ± 0.83[12]	0.02 ± 0.02[10]**
CTL Activity (25:1)	22.56 ± 1.38[12]	22.73 ± 2.34[12]	21.25 ± 1.39[12]	18.58 ± 1.08[12]	0.00 ± 0.00[10]**
CTL Activity (50:1)	41.93 ± 2.08[12]	43.70 ± 2.86[12]	42.58 ± 2.45[12]	39.15 ± 1.94[12]	0.00 ± 0.00[9]**

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LEGEND

Data are displayed as mean \pm SEM (N) of effector: target cell ratio unless otherwise noted.

^aCTL Activity is expressed as % target cell killing calculated as ((Sample Cr⁵¹ Release - Spontaneous Cr⁵¹ Release) / (Total Cr⁵¹ Release - Spontaneous Cr⁵¹ Release))*100

Statistical analysis performed by Jonckheere (trend) and Shirley or Dunn (pairwise) tests. The positive control group (15 mg/kg CPS) was excluded from trend test.

Statistical analysis for the positive control group (15 mg/kg CPS) compared to the vehicle control group was performed using the Wilcoxon rank sum test.

Statistical significance for the control group indicates a significant trend test.

Statistical significance for a treatment group indicates a significant pairwise test compared to the vehicle control group.

* Statistically significant at $P \leq 0.05$

** Statistically significant at $P \leq 0.01$

CTL = Cytotoxic T Lymphocytes

SEM = Standard Error of the Mean

SD = Study Day

CPS = Cyclophosphamide

Females from the vehicle control and treatment groups were removed on SD 43-44.

**** END OF REPORT ****